



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,308	11/07/2001	Brig Barnum Elliott	BBNT-P01-144	2133
28120	7590	06/16/2005	EXAMINER	
FISH & NEAVE IP GROUP ROPES & GRAY LLP ONE INTERNATIONAL PLACE BOSTON, MA 02110-2624			GESESSE, TILAHUN	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/039,308	Applicant(s) ELLIOTT ET AL.	
	Examiner Tilahun B Gesesse	Art Unit 2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18,20-25,27 and 28 is/are rejected.
- 7) ☐ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of claims

1. This is in response to applicant's argument filed January 28, 2005, in which claims 1-25, 27-28 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-18, 20-23 and 27-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Passman et al "Passman"(6,493,759).

Claims 1-3 10-11, 15 Passman discloses a method for integrating a wireless terminal into a wireless network, (see figure 4 and abstract) comprising:

Passman discloses determining whether the wireless terminal contains at least one functioning cluster transceiver (column 3, lines 43-53) attempting to affiliate the wireless terminal with a cluster head as a cluster member if the wireless terminal contains said at least one functioning cluster transceiver (column 3, lines 43-53 and figures 4-5) and operating the wireless terminal as a

cluster head if the wireless terminal does not contain said at least one functioning cluster transceiver (column 3, lines 43-53 and figures 3-5).

Regarding claim 4, 12-14 passman discloses repeating (registered) said attempting to affiliate if the wireless terminal does not contain one or more functioning backbone transceivers (column 4, lines 15-27).

Regarding claim 5, Passsman discloses receiving beacon messages from different cluster heads, ignoring cluster heads with a signal strength less than a threshold, returning an unsuccessful affiliation result if all cluster heads are ignored in said ignoring, and ordering any cluster heads not ignored in said ignoring into a list according to a predetermined criterion (resigning and clustering with other head clusters (see figure 4 and column 5, lines 5-63).

Regarding claim 6, Passman discloses the attempting to affiliate further sending an affiliation request to a cluster head at a top of the list, sending an affiliation confirmation to the cluster head at the top of the list if a response to the affiliation request is received, and deleting the cluster head at the top of the list if no response to the affiliation request is received see figure 4 and column 5, lines 5-63).

Regarding claims 7- 8, Passman discloses the executing an affiliation check includes'. storing a number of beacon messages from the affiliated cluster head, ascertaining whether a set fraction of the beacon messages has a signal strength above a threshold value, and continuing to operate as a cluster member

if a set fraction of the beacon messages has a signal strength above the threshold value (column 9, line 1-column 10, line 55)

Regarding claims 9, 16, Passman discloses delaying for a random period before said determining (column 10, lines 1-31).

Regarding claims 17 and 27, Passman discloses a wireless network,(see figures 4-7)comprising: a plurality of first wireless terminals configured to operate as cluster heads by communicating with at least one other cluster head over one or more backbone links, each one of the plurality of first wireless terminals including one backbone transceivers, and at least one second wireless terminal configured to operate as a cluster member by communicating with an associated cluster head over one or more local links, each one of the at least one second wireless terminals including one or more cluster transceivers, wherein at least one of the first and second wireless terminals includes both a backbone transceiver and a cluster transceiver column 9, line 1-column 10, line 55 and figures 4-9).

Regarding claims 18 and 28, Passman discloses the backbone transceiver is configured to operate over first distances and in a first frequency range, and wherein the cluster transceiver is configured to operate over second distances that are shorter than the first distances and in a second frequency range that is different from the first frequency range (column 10, lines 32-68).

Regarding claim 20-23, at least one of the first wireless terminals includes two different types of backbone transceivers (see figures 4-9).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Passman in view of Fischer (US patent No. 5,371,734).

Regarding claims 24-25, Passman does not teach discloses the one backbone transceivers includes one of the following:, a microwave transceiver, However, Fischer teaches TDMA transceiver (see abstract). It would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to utilize a microwave transceiver in particular time division multiplex access type of transceiver.

Allowable Subject Matter

6. Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art Passman does not teach the backbone transceiver includes a first radio operating in an ultrahigh frequency (UHF) range, and wherein the cluster transceiver includes a second radio operating at substantially 2.4 GHz.

Response to Arguments

Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ramanathan (US patent No. 6,594,468) discloses self organizing mobile wireless station network and configures itself into a multilayered network for relaying messages from station to station and (abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 571-272-7879. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

Application/Control Number: 10/039,308

Page 7

Art Unit: 2684

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 6/6/05
TILAHUN GESESSE
PRIMARY EXAMINER